

Influenza A and B. For the coming 1974-75 season, only one dose of the bivalent influenza vaccine will be recommended for adequate protection. Two injections (one of each of two vaccines) were necessary during the 1973-74 season as the disease potential of the Hong Kong strain of Influenza B was not realized until the spring of 1973 and it was too late to incorporate it into the already manufactured bivalent vaccine produced for the 1973-74 season.

Live vaccines are still in the developmental state and demonstrate varying degrees of protection. Side effects vary from no clinical systemic signs to minimal upper respiratory symptoms.

The following table is a brief summary of the current status of live influenza vaccines.

STEPHAN BILLSTEIN, MD, MPH

REFERENCES

- Jordon WS Jr, Hopps HE, Merigan TC: Influenza and interferon research in the Soviet Union—January 1973. *J Infect Dis* 128:261, Aug 1973
- Kilbourne ED: The molecular epidemiology of influenza. *J Infect Dis* 127:478, Apr 1973
- Maugh TH II: Influenza—The last of the great plagues. *Science* 180:1042, Jun 1973
- Maugh TH II: Influenza (II)—A persistent disease may yield to new vaccines. *Science* 180:1159, Jun 1973

Scombroid Poisoning from Mahi-Mahi

RECENT OUTBREAKS have shown that spoiled mahi-mahi prepared from dolphin fish (family Coryphaenidae) can cause acute food poisoning with characteristic symptoms previously believed to be associated only with the Scombroidea family of fishes (for example, tuna, mackerel, bonito, albacore, skipjack). Symptoms include nausea, vomiting, diarrhea, abdominal cramps, swelling and flushing of the face, oral burning and blistering, thirst, metallic or peppery taste, pruritis, severe throbbing headache and urticaria. Thus, the patient appears to have both an allergic reaction and a gastro-intestinal upset. The disease is typical of chemical poisoning in that the incubation period is brief, ranging from a few minutes to one hour. The cause is related to spoilage, whereby bacteria break down the histidine in the flesh of those species that can cause disease. The spoilage may be so minimal that it is not obvious to the patient.

The disease is usually self-limited with relief in 8 to 12 hours. Treatment with antihistamines or sympathomimetics (for example, epinephrine

Current Status of Live Influenza Vaccines

| Research Group | Vaccine Type (Production method) | Clinical Effect on Recipients | Degree of Protection Against Wild Virus Infection |
|---|--|---|--|
| 1. Chanock RM, et al National Inst. of Allergy & Infectious Disease | Temperature sensitive variant. Grows at lower temperature than wild virus. Produced by use of 5-fluorouracil acting on previous wild virus strain (1965A ₂ , HKA ₃). | 25 percent volunteers have mild upper respi- ratory infection symp- toms. | 100 percent in those vol- unteers challenged with wild virus. |
| 2. Davenport FM, Massab HF University of Michigan | Temperature sensitive variant. Older, mouse-adapted influenza subtype was used. | ? | ? |
| 3. Kilbourne ED Mt. Sinai Hospital, New York, N.Y. | Vaccine against neuraminidase antigen. Used recombination techniques. "Infection-permissive" immuni- zation. | Mild symptoms in some recipients. | Trials under way. |
| 4. Hannoun C Pasteur Institute, Paris | Point variant that no longer mutates. Grow current circulating strain in presence of antibodies specific for variant. | Minimal. | Percentages not available. |
| 5. Russian vaccines | A. Intranasal allantoic fluid attenuated virus. B. Oral tissue culture fluid (chick embryo kidney cells). | Reactogenic. Limited to adults 16 and older. Given as drink to 1 year and older | Poor. Poor. |
| 6. Smith, Kline and French | Live attenuated form of A ₂ (Eng 42/74). Administer intranasally with drops or nasal spray. | No symptoms Non-spreading Antigenic yields good nasal and serum ABY response. | Trials under way with wild influenza virus chal- lenge (including Eng 42/ 74 and Australia 73). |

hydrochloride), along with supportive care, has been found to be helpful. The syndrome can easily be confused with "Chinese restaurant syndrome."

The local health department should be notified promptly when scombroid poisoning is suspected, as preventive action can frequently be taken by removing any suspect fish from the marketplace.

DONALD G. RAMRAS, MD

REFERENCES

- Dack GM: Food Poisoning. Chicago, University of Chicago Press, 1956, pp 43-44
 Center for Disease Control Morbidity and Mortality Weekly Report: Vol 22, Atlanta, Feb 24, 1973, pp 69-70
 California Morbidity: No 23. State of California Department of Health, Berkeley, Jun 15, 1973

New Guidelines for Determining When Tuberculosis Patients Are No Longer a Public Health Risk

THE CALIFORNIA CONFERENCE OF LOCAL HEALTH OFFICERS, on the recommendation of the California Tuberculosis Controllers Association, recently adopted new guidelines for determining when tuberculosis patients are no longer a public health risk in the community and thus can be released from all restrictions on their activities.

GUIDELINES

Tuberculosis patients under certain conditions, even though still harboring viable tubercle bacilli, present a minimal hazard of disease transmission to others in the community. It is believed that in cases where the criteria listed here are fulfilled, the patients present such an insignificant risk to the community that restriction of their activities is not justifiable.

Criteria

- The patient has had at least one month of continuous, adequate chemotherapy with at least two drugs to which his organisms are sensitive.
- The patient has responded to treatment both clinically and radiologically and is asymptomatic.
- The patient is now, and can be expected to remain, under medical supervision for his disease.
- The patient is cooperative and understands the nature of his disease, and it can be expected that he will continue on drug therapy and that the prescribed drugs will be available to him for the necessary period of time.
- The patient's home situation has been evaluated by public health personnel and is considered suitable for such a patient.

- The patient's sputum has been examined by concentration and culture by approved public health laboratory methods, and at least three consecutive concentrated smears have been negative.

It is emphasized that these are *guidelines* only. In all instances the local health officer has discretion and final responsibility for the control of communicable diseases within his jurisdiction.

DONALD G. RAMRAS, MD

REFERENCE

- Recommendations for the Control of Tuberculosis. Health and Welfare Agency, Dept of Health, State of California, Berkeley, 1974, pp 10-11

Amniocentesis

TRANSABDOMINAL AMNIOCENTESIS, a technique used in the latter stages of pregnancy to prevent Rh hemolytic disease and respiratory distress syndrome, can also be used earlier (about the 15th week of gestation) to detect certain genetic disorders and allow their prevention by therapeutic abortion. Experienced genetic screening centers have found amniocentesis to be a remarkably low-risk procedure. The recent introduction of ultrasonic placental localization has reduced fetal hazards even further.*

There are several situations in which amniocentesis should be considered.

- *Chromosomal Disorders.* The risk of Down's syndrome, as well as other chromosomal disorders, increases with maternal age and with a history of previous affected offspring. The risk of bearing a child with Down's syndrome is about 1 in 2,000 for women in their 20's, 1 in 300 for women in their 30's and 1 in 40 for women in their 40's. Therefore, amniocentesis has been advised for women over age 35, or those who have had previous chromosomal anomalies such as Down's syndrome. It is advised particularly when parents are known carriers of chromosomal translocations.
- *Metabolic Disorders.* A number of inherited metabolic disorders, such as Lesch-Nyhan syndrome, galactosemia, lysosomal acid phosphatase deficiency, mucopolysaccharidosis, Pompe's disease, Tay-Sachs disease, Niemann-Pick disease, Fabry's disease and methylmalonic aciduria, have been specifically identified by amniocentesis. Be-

*HEW's Division of Biological Effects, Bureau of Radiological Health has just initiated a survey of women exposed during 1972 to determine whether ultrasound has any adverse effects on the mother or fetus.